

Amendments to the Claims:

The following claims will replace all prior versions of the claims in this application (in the unlikely event that no claims follow herein, the previously pending claims will remain):

1. (Currently amended) A non-solution method of preparing a soluble branched polymer comprising mixing together a monofunctional monomer ~~at least comprising a methacrylate monomer, said monofunctional monomer~~ having one polymerisable double bond per molecule with from 0.3 – 100% w/w, based on the weight of the monofunctional monomer, of a polyfunctional monomer having at least two polymerisable double bonds per molecule and from 0.0001 – 50% w/w, based on the weight of the monofunctional monomer, of a chain transfer agent and optionally a free-radical polymerisation initiator and thereafter reacting said mixture to form said polymer, such that the conversion of monomer to polymer is greater than 90% and wherein the weight average molecular weight (Mw) of the branched polymer is in the range of 2,000 to 200,000.
2. (Currently amended) A non-solution method of preparing a soluble branched polymer comprising mixing together a monofunctional monomer at least comprising a methacrylate monomer, said monofunctional monomer having one polymerisable double bond per molecule with from 0.3 – 100% w/w, based on the weight of the monofunctional monomer, of a polyfunctional monomer having at least two polymerisable double bonds per molecule and from 0.0001 – 50% w/w, based on the weight of the monofunctional monomer, of a chain transfer agent and optionally a free-radical polymerisation initiator and thereafter reacting said mixture to form said polymer, such that the conversion of monomer to polymer is greater than 90% and wherein the polyfunctional monomer is at least one monomer selected from the group consisting of ethylene glycol di(meth)acrylate, tripropylene glycol di(meth)acrylate, butanediol di(meth)acrylate, neopentyl glycol di(meth)acrylate, diethylene glycol di(meth)acrylate, triethyleneglycol di(meth)acrylate, dipropylene glycol diethyleneglycol di(meth)acrylate, triethylene glycol di(meth)acrylate, dipropylene glycol di(meth)acrylate, allyl (meth) acrylate, divinyl benzene, tripropylene glycol tri(meth)acrylate, trimethylol propane tri(meth)acrylate, pentaerythritol tri(meth)acrylate, pentaerythritol tetra(meth)acrylate and dipentaerythritol hexa(meth)acrylate.
3. (Currently amended) A non-solution method of preparing a soluble branched polymer comprising mixing together a monofunctional monomer ~~comprising at least a methacrylate monomer, said monofunctional monomer~~ having one polymerisable double

bond per molecule, with from 0.3 – 100% w/w, based on the weight of the monofunctional monomer, of a polyfunctional monomer having at least two polymerisable double bonds per molecule and from 0.0001 – 50% w/w, based on the weight of the monofunctional monomer, of a chain transfer agent and optionally a free-radical polymerisation initiator and thereafter reacting said mixture to form said polymer such that the conversion of monomer to polymer is greater than 90%.

4. (Original) The method of claim 1 wherein said chain transfer agent comprises a monofunctional thiol or a polyfunctional thiol.
5. (Original) The method of claim 2 wherein said chain transfer agent comprises a monofunctional thiol or a polyfunctional thiol.
6. (Original) The method of claim 3 wherein said chain transfer agent comprises a monofunctional thiol or a polyfunctional thiol.
7. (Currently Amended) The method of claim 1 comprising mixing together wherein said monofunctional monomer ~~has~~having one polymerisable double bond per molecule with from 0.5 – 100% w/w, based on the weight of the monofunctional monomer, of said polyfunctional monomer having at least two polymerisable double bonds per molecule.
8. (Currently Amended) The method of claim 2 comprising mixing together wherein said monofunctional monomer ~~has~~having one polymerisable double bond per molecule with from 0.5 – 100% w/w, based on the weight of the monofunctional monomer, of said polyfunctional monomer having at least two polymerisable double bonds per molecule.
9. (New) The method of claim 3 comprising mixing together said monofunctional monomer having one polymerisable double bond per molecule with from 0.5 – 100% w/w, based on the weight of the monofunctional monomer, of said polyfunctional monomer having at least two polymerisable double bonds per molecule.